

## CLAIMS

1       1. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising  
2 the steps of:  
3           generating a command via a first computer at a first location;  
4           transmitting the command to a second computer at a second location over a remote data link;  
5           sending the command from the second computer to a digital signal processor in ~~one of a~~  
6 ~~telephone and the hearing aid;~~  
7           outputting a test tone from the digital signal processor based on the command to a user of [[the]]  
8 ~~a telephone wearing the hearing aid;~~  
9           receiving a user response to the test tone over the remote data link; and  
10          adjusting the hearing aid based on the user response to the test tone, wherein:  
11            said adjusting step comprises the steps of:  
12              transmitting the user response to the first computer over the remote data link;  
13              retrieving a stored audiogram from memory based on an accuracy of the  
14 response; and  
15              uploading the audiogram into the hearing aid of the user over the remote data  
16 link; and  
17            said audiogram is a compensation curve for adjusting performance characteristics of the  
18 hearing aid based on the user response.

1       2. (previously presented) The method of claim 1, wherein said command is sent from the  
2 second computer to the digital signal processor as a DTMF tone.

1       3. (previously presented) The method of claim 1, wherein said receiving step comprises  
2 inputting a response to the command into the second computer via a keyboard attached to the computer.

1       4. (original) The method of claim 1, wherein said receiving step comprises inputting a  
2 response to the command via a key pad on the telephone.

1       5-6. (canceled)

1       7. (previously presented) The method of claim 1, wherein said adjusting step further  
2 comprises determining the accuracy of the user response.

1       8. (currently amended) A method for adjusting a hearing aid of a user, comprising the steps  
2 of:  
3           generating a command via a computer;  
4           sending the command to a digital signal processor in ~~one of a telephone and the hearing aid;~~  
5           outputting a test tone from the digital signal processor based on the command to the user of  
6 [[the]] ~~a telephone wearing the hearing aid;~~  
7           receiving a response to the test tone by the user;  
8           storing the response to the test tone by the user in the computer;  
9           retrieving a stored audiogram from memory based on an accuracy of the stored response; and  
10          uploading the audiogram into the hearing aid of the user.

1       9. (previously presented) The method of claim 8, wherein said command is sent from the  
2 computer to the digital signal processor as a DTMF tone.

1           10. (previously presented) The method of claim 8, wherein said receiving step comprises  
2 inputting a response to the command into the computer via a keyboard attached to the computer.

1           11. (original) The method of claim 8, wherein said receiving step comprises inputting a  
2 response to the command via a keypad on the telephone.

1           12. (canceled)

1           13. (previously presented) The method of claim 8, wherein said audiogram is a  
2 compensation curve for adjusting performance characteristics of the hearing aid based on the user  
3 response.

1           14. (original) The method of claim 8, wherein the command is generated by a first computer  
2 at a first location and is received by a second computer at a second location, and said second computer  
3 sends the command to the digital processor.

1           15. (original) The method of claim 14, wherein the response is stored in the first computer.

1           16. (original) The method of claim 14, wherein the response is stored in the second  
2 computer.

1           17. (original) The method of claim 14, wherein the response is stored in the first and second  
2 computers.

1           18. (currently amended) The method of claim 8, wherein the ~~digital signal processor is~~  
2 located in the hearing aid and step of sending the command to the digital signal processor is by a wireless  
3 link.

1           19. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising  
2 the steps of:

3           generating a command via a first computer at a first location;  
4           transmitting the command to a second computer at a second location over a remote data link;  
5           sending the command from the second computer to a digital signal processor in ~~one of a~~  
6           telephone and the hearing aid;  
7           outputting a test tone from the digital signal processor based on the command to a user of [[the]]  
8           a telephone wearing the hearing aid;  
9           receiving a user response to the test tone over the remote data link; and  
10          adjusting the hearing aid based on the user response to the test tone, wherein said receiving step  
11          comprises inputting a response to the command into the second computer via a keyboard attached to the  
12          computer.

1           20. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising  
2 the steps of:

3           generating a command via a first computer at a first location;  
4           transmitting the command to a second computer at a second location over a remote data link;  
5           sending the command from the second computer to a digital signal processor in ~~one of a~~  
6           telephone and the hearing aid;  
7           outputting a test tone from the digital signal processor based on the command to a user of [[the]]  
8           a telephone wearing the hearing aid;  
9           receiving a user response to the test tone over the remote data link; and

10                   adjusting the hearing aid based on the user response to the test tone, wherein said adjusting step  
11                   comprises the steps of:

12                   transmitting the user response to the first computer over the remote data link;  
13                   determining an accuracy of the user response;  
14                   retrieving a stored audiogram from memory based on the accuracy of the response; and  
15                   uploading the stored audiogram into the hearing aid of the user over the remote data link.

1                   21. (currently amended) A method for adjusting a hearing aid of a user, comprising the steps  
2                   of:  
3                   generating a command via a computer;  
4                   sending the command to a digital signal processor in ~~one of a telephone and~~ the hearing aid;  
5                   outputting a test tone from the digital signal processor based on the command to the user of  
6                   [[the]] a telephone wearing the hearing aid;  
7                   receiving a response to the test tone by the user; and  
8                   storing the response to the test tone by the user in the computer, wherein said receiving step  
9                   comprises inputting a response to the command into the computer via a keyboard attached to the  
10                  computer.

1                   22. (currently amended) A method for adjusting a hearing aid of a user, comprising the steps  
2                   of:  
3                   generating a command via a computer;  
4                   sending the command to a digital signal processor in ~~one of a telephone and~~ the hearing aid;  
5                   outputting a test tone from the digital signal processor based on the command to the user of  
6                   [[the]] a telephone wearing the hearing aid;  
7                   receiving a response to the test tone by the user; and  
8                   storing the response to the test tone by the user in the computer, wherein the command is  
9                   generated by a first computer at a first location and is received by a second computer at a second  
10                  location, and said second computer sends the command to the digital processor.

1                   23. (currently amended) A method for adjusting operations of a hearing aid of a user,  
2                   wherein:  
3                   a computer system transmits a sequence of one or more non-audible commands to a processor in  
4                   ~~one of a telephone and~~ the hearing aid;  
5                   the processor causes an audible test tone to be generated in response to receipt of each  
6                   command[,], wherein:  
7                   when the processor is in the telephone, the telephone generates each test tone; and  
8                   when the processor is in the hearing aid, the hearing aid generates each test tone;  
9                   the computer system receives a response to each of one or more of the test tones from the user;  
10                  the computer system processes the one or more responses from the user to generate parameters  
11                  for controlling the operations of the hearing aid; and  
12                  the computer system transmits the parameters to the hearing aid to adjust the operations of the  
13                  hearing aid.

1                   24-28. (canceled)

1                   29. (currently amended) The invention of claim [[28]] 23, wherein the user enters each  
2                   response via a key pad on [[the]] a telephone and the telephone transmits the user's responses to the  
3                   computer system.

1       30. (currently amended) The invention of claim [[28]] 23, wherein the user enters each  
2 response via a keyboard attached to the computer system.

1       31. (previously presented) The invention of claim 23, wherein:  
2       the computer system comprises a local computer co-located with the user; and  
3       the local computer transmits the commands to the processor and receives the user's responses.

1       32. (previously presented) The invention of claim 31, wherein the local computer generates  
2 and transmits the parameters to the hearing aid.

1       33. (previously presented) The invention of claim 31, wherein:  
2       the computer system further comprises a remote computer located remotely from the user;  
3       the local computer transmits the user's responses to the remote computer;  
4       the remote computer generates and transmits the parameters to the local computer; and  
5       the local computer transmits the parameters to the hearing aid.

1       34. (previously presented) The invention of claim 33, wherein the remote computer  
2 transmits each command to the local computer.

1       35. (previously presented) The invention of claim 23, wherein:  
2       the computer system comprises a remote computer located remotely from the user; and  
3       the remote computer transmits the commands to the processor, receives the user's responses, and  
4       generates and transmits the parameters to the hearing aid.

1       36. (previously presented) A hearing aid for a user, the hearing aid comprising a processor  
2 adapted to:  
3       receive a sequence of one or more non-audible commands from a computer system;  
4       cause an audible test tone to be generated by the hearing aid in response to receipt of each  
5 command, wherein:  
6       the computer system receives a response to each of one or more of the test tones from the  
7 user; and  
8       the computer system processes the one or more responses from the user to generate  
9 parameters for controlling operations of the hearing aid; and  
10      receive the parameters from the computer system to adjust the operations of the hearing aid.

1       37. (previously presented) The invention of claim 36, wherein the processor receives the  
2 command sequence and the parameters directly from the computer system.

1       38. (previously presented) The invention of claim 36, wherein the processor receives the  
2 command sequence and the parameters from the computer system via a telephone.

1       39. (previously presented) The invention of claim 38, wherein the command sequence and  
2 the parameters are transmitted to the processor from the telephone using DTMF signaling.

1       40-43. (canceled)

1       44. (currently amended) A computer system for adjusting operations of a hearing aid of a  
2 user, wherein the computer system is adapted to:

3 transmit a sequence of one or more non-audible commands to a processor in ~~one of a telephone~~  
4 and the hearing aid, wherein the processor causes an audible test tone to be generated in response to  
5 receipt of each command[[],] wherein:

6           when the processor is in the telephone, the telephone generates each test tone; and  
7           when the processor is in the hearing aid, the hearing aid generates each test tone;  
8           receive a response to each of one or more of the test tones from the user;  
9           process the one or more responses from the user to generate parameters for controlling the  
10 operations of the hearing aid; and  
11           transmit the parameters to the hearing aid to adjust the operations of the hearing aid.

1           45-49. (canceled)

1           50. (currently amended) The invention of claim [[49]] 44, wherein the user enters each  
2 response via a key pad on [[the]] a telephone and the computer system is adapted to receive the user's  
3 responses from the telephone.

1           51. (currently amended) The invention of claim [[49]] 44, wherein the computer system is  
2 adapted to receive each response from the user via a keyboard attached to the computer system.

1           52. (previously presented) The invention of claim 44, wherein:  
2           the computer system comprises a local computer co-located with the user; and  
3           the local computer is adapted to transmit the commands to the processor and receive the user's  
4 responses.

1           53. (previously presented) The invention of claim 52, wherein the local computer is adapted  
2 to generate and transmit the parameters to the hearing aid.

1           54. (previously presented) The invention of claim 52, wherein:  
2           the computer system further comprises a remote computer located remotely from the user;  
3           the local computer is adapted to transmit the user's responses to the remote computer;  
4           the remote computer is adapted to generate and transmit the parameters to the local computer;  
5           and  
6           the local computer is adapted to transmit the parameters to the hearing aid.

1           55. (previously presented) The invention of claim 54, wherein the remote computer is  
2 adapted to transmit each command to the local computer.

1           56. (previously presented) The invention of claim 44, wherein:  
2           the computer system comprises a remote computer located remotely from the user; and  
3           the remote computer is adapted to transmit the commands to the processor, receive the user's  
4 responses, and generate and transmit the parameters to the hearing aid.

1           57. (new) A method for adjusting operations of a hearing aid of a user, wherein:  
2           a computer system transmits a sequence of one or more non-audible commands to a processor in  
3           one of a telephone and the hearing aid;  
4           the processor causes an audible test tone to be generated in response to receipt of each command,  
5           wherein:  
6           when the processor is in the telephone, the telephone generates each test tone; and  
7           when the processor is in the hearing aid, the hearing aid generates each test tone;  
8           the computer system receives a response to each of one or more of the test tones from the user;

9           the computer system processes the one or more responses from the user to generate parameters  
10          for controlling the operations of the hearing aid;  
11          the computer system transmits the parameters to the hearing aid to adjust the operations of the  
12          hearing aid;  
13          the computer system comprises a local computer co-located with the user; and  
14          the local computer transmits the commands to the processor and receives the user's responses.

1           58. (new) The invention of claim 57, wherein the local computer generates and transmits the  
2          parameters to the hearing aid.

1           59. (new) The invention of claim 57, wherein:  
2          the computer system further comprises a remote computer located remotely from the user;  
3          the local computer transmits the user's responses to the remote computer;  
4          the remote computer generates and transmits the parameters to the local computer; and  
5          the local computer transmits the parameters to the hearing aid.

1           60. (new) The invention of claim 59, wherein the remote computer transmits each command  
2          to the local computer.

1           61. (new) A method for adjusting operations of a hearing aid of a user, wherein:  
2          a computer system transmits a sequence of one or more non-audible commands to a processor in  
3          one of a telephone and the hearing aid;  
4          the processor causes an audible test tone to be generated in response to receipt of each command,  
5          wherein:  
6              when the processor is in the telephone, the telephone generates each test tone; and  
7              when the processor is in the hearing aid, the hearing aid generates each test tone;  
8          the computer system receives a response to each of one or more of the test tones from the user;  
9          the computer system processes the one or more responses from the user to generate parameters  
10         for controlling the operations of the hearing aid;  
11         the computer system transmits the parameters to the hearing aid to adjust the operations of the  
12         hearing aid;  
13         the computer system comprises a remote computer located remotely from the user; and  
14         the remote computer transmits the commands to the processor, receives the user's responses, and  
15         generates and transmits the parameters to the hearing aid.

1           62. (new) A computer system for adjusting operations of a hearing aid of a user, wherein the  
2          computer system is adapted to:  
3              transmit a sequence of one or more non-audible commands to a processor in one of a telephone  
4          and the hearing aid, wherein the processor causes an audible test tone to be generated in response to  
5          receipt of each command, wherein:  
6              when the processor is in the telephone, the telephone generates each test tone; and  
7              when the processor is in the hearing aid, the hearing aid generates each test tone;  
8              receive a response to each of one or more of the test tones from the user;  
9              process the one or more responses from the user to generate parameters for controlling the  
10         operations of the hearing aid;  
11              transmit the parameters to the hearing aid to adjust the operations of the hearing aid;  
12              the computer system comprises a local computer co-located with the user; and  
13              the local computer is adapted to transmit the commands to the processor and receive the user's  
14         responses.

1           63. (new) The invention of claim 62, wherein the local computer is adapted to generate and  
2 transmit the parameters to the hearing aid.

1           64. (new) The invention of claim 62, wherein:  
2           the computer system further comprises a remote computer located remotely from the user;  
3           the local computer is adapted to transmit the user's responses to the remote computer;  
4           the remote computer is adapted to generate and transmit the parameters to the local computer;  
5 and  
6           the local computer is adapted to transmit the parameters to the hearing aid.

1           65. (new) The invention of claim 64, wherein the remote computer is adapted to transmit  
2 each command to the local computer.

1           66. (new) A computer system for adjusting operations of a hearing aid of a user, wherein the  
2 computer system is adapted to:  
3           transmit a sequence of one or more non-audible commands to a processor in one of a telephone  
4 and the hearing aid, wherein the processor causes an audible test tone to be generated in response to  
5 receipt of each command, wherein:  
6           when the processor is in the telephone, the telephone generates each test tone; and  
7           when the processor is in the hearing aid, the hearing aid generates each test tone;  
8           receive a response to each of one or more of the test tones from the user;  
9           process the one or more responses from the user to generate parameters for controlling the  
10 operations of the hearing aid;  
11          transmit the parameters to the hearing aid to adjust the operations of the hearing aid;  
12          the computer system comprises a remote computer located remotely from the user; and  
13          the remote computer is adapted to transmit the commands to the processor, receive the user's  
14 responses, and generate and transmit the parameters to the hearing aid.